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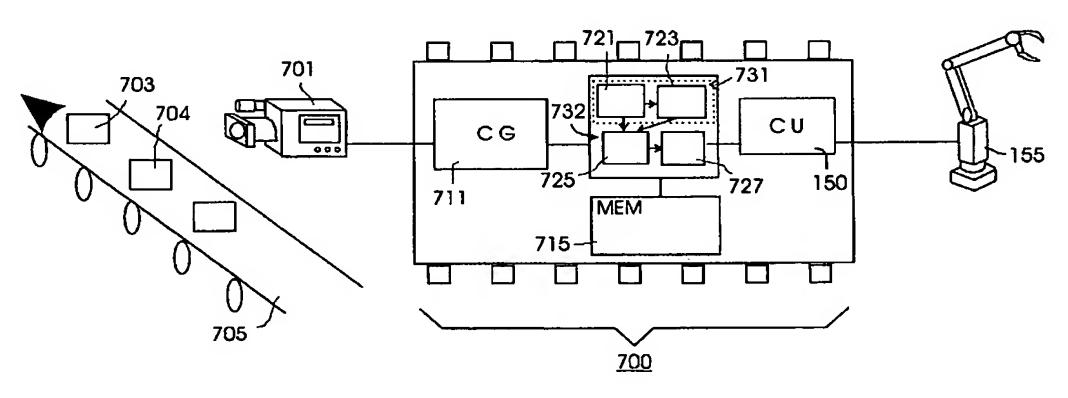
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(54) Title: METHOD AND IMAGE PROCESSING DEVICE FOR ANALYZING AN OBJECT CONTOUR IMAGE, METHOD AND IMAGE PROCESSING DEVICE FOR DETECTING AN OBJECT, INDUSTRIAL VISION APPARATUS, SMART CAMERA, IMAGE DISPLAY, SECURITY SYSTEM, AND COMPUTER PROGRAM PRODUCT



(57) Abstract: The method of analyzing an object contour image (100), useful for fast object detection based on contour matching comprises: specifying a scan path (306) of positions (xR, yR) in the contour image (100) of a region of interest (303), for processing substantially all pixels of contour image (100); constructing a first table (111) containing for each pixel in the contour image (100) of non-zero value at least one position coordinate (x); constructing a fourth table (311) corresponding to a position of the region of interest (303), containing at least for each parallel line of pixels traversing the region of interest (303), an index (312) of an entry (121) in the first table (111), of, given a scan direction, the first non zero pixel of the contour image (100) lying on the respective parallel line and being inside the region of interest (303); and constructing a fifth table (313) corresponding to a position of the region of interest (303), containing at least for each parallel line of pixels traversing the region of interest (303), an index (314) of an entry (121) in the first table (111), of, given the scan direction, the last non zero pixel of the contour image (100) lying on the respective parallel line and being inside the region of interest (303).

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